REMARKS

Applicants greatly appreciate the tentative allowance of Claim 3. In accordance with the Action, Claim 3 has been rewritten (as new Claim 18) in independent form and incorporates all the features of any intervening claims, and therefore should be deemed allowable.

Claims 1-17 have been canceled, without prejudice or disclaimer, rendering the rejection of Claims 9-12, and 15-17 under 35 U.S.C. § 112, and the objection of Claims 1, 3-5, 7, and 13-14 moot. Claims 18-28 have been added without the addition of any new matter as support may be found in the relevant portions of the specification and figures.

Since the allowable subject matter of claim 3 is present in new claim 17, claim 17 is considered patentable. Claims 19-24 are at least patentable in view of their dependency from claim 17 and their individually recited features.

Reconsideration of the application is respectfully requested.

1. Rejection of Claims 1-2, 4, and 8-12 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent 4,750,273 (Parkes)

Claims 1-2, 4, and 8-12 (subject matter being incorporated into new claims 18-22, and 24-28) stand rejected as being unpatentable over Parkes. For the reasons discussed below, Applicant respectfully traverses this rejection by asserting that Parkes fails to disclose, suggest, or teach at least one element of claim 25, or 27. Further, Claims 26 and 28, which depend from claims 25 or 27, respectively, are also patentable based on their dependency on claims 25 or 27, and their individually recited elements.

a. Invention Distinguished

Claims 25 and 27 similarly recite the step of heating a sample by sequentially raising a heating temperature to detect time rate of a change of moisture percentage for the sample such that the time rate of change of moisture percentage is detected by measuring a change of mass of the sample during heating. Moreover, these claims recited the step of detecting at least one value of a pre-determined parameter of a time function related to the time rate of change of moisture percentage, and determining and selecting an optimum heating temperature for the sample in accordance with the detected value of said parameter.

b. References Distinguished

Parkes discloses a computer-controlled grain drying system that allows an operator to set a desired grain moisture content, a maximum heating temperature, a starting temperature, and a current time wherein these inputs are used by a computer 6 to work towards the intended moisture content by incrementally changing the drying air temperature (see FIGs. 1-3, 5; Abstract; col. 2, lines 46-64; col. 11, lines 33-68; col. 12, lines 1-34).

In contrast to the recited features, Parkes makes no mention of detecting at least one value of a pre-determined parameter of a time function related to said time rate of change of moisture percentage, and determining and selecting an optimum heating temperature for the sample in accordance with the detected value of said parameter. Instead, Parkes solely works toward a desired grain moisture content, as set by an operator, by continually adjusting the temperature device in response to measuring the moisture content as a function of the dielectric constant of the grain sample as related to the changing capacitance of the sample (see FIG. 2; col. 2, lines 46-64).

Specifically, Parkes states that "...the capacitance of the cell 8, as measured by the meter 61, is varied by the dielectric constant of any material which is present in the active region 64 of the cell 8...the amount of moisture in a sample of grain determines, for the most part, the dielectric constant of the grain sample, whereby the moisture meter 61 is operative to relate the moisture content of a sample of grain to the capacitance of the cell 8 with the sample therein..." (See FIG. 2; col. 2, lines 46-61). Thus, Parkes measures the changing capacitance of the grain sample to determine current moisture content which does not relate to a parameter of a time function related to the time rate of change of the moisture percentage.

Detecting a value of a pre-determined parameter of a time function related to the time rate of change of moisture percentage for the sample as recited is significantly different from continually measuring the change in capacitance for the sample to determine current moisture content as disclosed by Parkes. Parkes makes no mention of the measuring the changing capacitance or dielectric constant as a time function, but simply makes discrete measurements of the capacitance with no regard to time to work towards the desired moisture content.

Further, Parkes detects moisture content completely different from the recited invention. The present invention detects moisture content by measuring the change in mass of the sample as recited which is in strong contrast to detecting moisture content using the change in capacitance of the sample as disclosed by Parkes.

Also, Parkes performs a completely different function from the recited invention. Parkes makes no mention of determining an optimum heating temperature in accordance with the detected value of the parameter of the time function as recited as in strong contrast Parkes simply works toward and determines an optimum moisture content rather than determining an optimum heating temperature as recited.

Determining and selecting an optimum moisture content is significantly different from determining and selecting an optimum heating temperature as recited.

Accordingly, Applicants submit that Parkes does not disclose, suggest or teach the claimed invention of claims 25-28. Withdrawal of the rejection is respectfully requested.

2. Rejection of Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Parkes and U.S. Patent 5,257,532 (Hayakawa)

Hayakawa fails to make up for the above-described shortcomings of Parkes as this reference is solely relied on as a teaching of measuring the temperature difference versus natural logarithm of heating time response of a sample during a predetermined interval of applying heat. Thus, claim 22 (incorporating subject matter of original claim 9) is similarly distinguished from this reference since it omits the recited feature of detecting at least one value of a pre-determined parameter of a time function related to said time rate of change of moisture percentage, and determining and selecting an optimum heating temperature for the sample in accordance with the detected value of said parameter device.

Accordingly, Applicant submits that Parkes and Hayakawa, whether considered collectively or individually, do not disclose, suggest or teach the claimed invention of claim 22. Withdrawal of the rejection is respectfully requested.

3. Conclusion

In view of the amended claims and the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that claims 18-28 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicant's attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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